

CLAIMS

The following is a courtesy copy of the claims, indicating that no changes are made.

1.– 25. (Canceled)

26. (Previously Presented) A method, at a decoder in a subscriber television system, for determining a service group associated with the decoder, the method comprising the steps of:

(a) retrieving a service group table from a signal on the transmission medium, wherein the service group table includes a plurality of service group identifications, a plurality of transport stream identifications, and tuning information associated with at least one transport stream identification;

(b) retrieving at least a portion of the tuning information from the service group table, the tuning information including at least one frequency, wherein the at least one frequency is associated with the at least one transport stream identification;

(c) tuning to a frequency retrieved from the tuning information;

(d) determining if a valid signal is present at the tuned frequency;

(e) in response to determining that a valid signal is detected at the tuned frequency, determining the transport stream identification associated with the tuned frequency and, from the determined transport stream identification, determining an associated service group from the service group table as the service group for the decoder;

(f) comparing the determined service group for the decoder with a previously stored service group; and

(g) in response to a determination that the determined service group for the decoder is different than the previously stored service group, transmitting the determined service group for the decoder to a system controller.

27. (Previously Presented) The method of claim 26, further comprising in response to determining that a valid signal is not detected at the tuned frequency, repeating steps (c) – (e) for the remaining frequencies in the service group table until a valid signal is detected.

28. (Previously Presented) The method of claim 26, further comprising storing the determined service group on the decoder.

29. (Previously Presented) The method of claim 26, wherein the step of determining whether a valid signal is present on the tuned frequency comprises determining whether the tuned frequency includes an MPEG transport stream.

30. (Previously Presented) The method of claim 26, wherein the decoder is a home communications terminal, a television, or a computer.

31. (Previously Presented) A method for determining a service group association of at least one decoder, comprising the steps of:

creating, at the headend, a service group table for the subscriber television system, wherein the service group table includes a plurality of service group identifications, a plurality

of transport stream identifications, and tuning information associated with at least one transport stream identification;

causing to be transmitted, from the headend, the service group table via the transmission medium to the at least one decoder;

receiving a message, at the headend, from the least one decoder, the message including the service group associated with the at least one decoder; and

recording, at the headend, the relationship of the decoder to the associated service group.

32. (Previously Presented) The method of claim 31, wherein the service group table is in a Moving Picture Experts Group table format.

33. (Previously Presented) The method of claim 31, wherein the decoder is a home communications terminal, a television, or a computer.

34. (Previously Presented) A modulator for transmitting a service group table in a subscriber television system, the modulator comprising:

a means for creating a service group table, wherein the service group table includes a plurality of service group identifications, a plurality of transport stream identifications, and tuning information associated with at least one transport stream identification; and

a transmitter for transmitting the service group table.

35. (Previously Presented) The modulator of claim 34, wherein the modulator is a Quadrature Amplitude Modulation modulator.

36. (Previously Presented) The modulator of claim 34, further including a means responsive to commands for controlling the creation of the service group table.

37. (Previously Presented) The modulator of claim 34, wherein the service group table is inserted into an MPEG (Motion Picture Experts Group) transport stream.

38. (Previously Presented) A decoder configured to determine an association with a service group of a subscriber television system, the decoder comprising:

- a tuner for tuning to a signal received from a transmission medium;

- means for retrieving a service group table from the tuned signal, wherein the service group table includes a plurality of service group identifications, a plurality of transport stream identifications, and tuning information associated with at least one transport stream identification;

- means for retrieving tuning information from the service group table;

- means for causing the re-tuning of the tuner to at least one frequency indicated by the tuning information;

- means for determining if a valid signal is present on the at least one frequency; and

- means for determining, from a transport stream identification associated with the frequency with a valid signal, a service group to which the decoder belongs.

39. (Previously Presented) The decoder of claim 38, further comprising:
a memory for storing a currently associated service group; and
means for determining if the associated service group is the same as the currently associated service group and, if it is not, replacing the currently associated service group in the memory with the associated service group.

40. (Previously Presented) The decoder of claim 38, further comprising a transmitter for transmitting the service group via the transmission medium to the headend.

41. (Previously Presented) The decoder of claim 38, wherein the decoder is a home communications terminal, a television, or a computer.

42. (Previously Presented) A system controller for causing to be stored and updated a database of a service group association for each of a plurality of decoders of a subscriber television system, the system controller comprising:

means for causing to be stored in the database of the service group, association for each of the plurality of decoders;

means for causing the creation of a service group table for the subscriber television system, wherein the service group table includes a plurality of service group identifications, a plurality of transport stream identifications, and tuning information associated with at least one transport stream identification for determining a service group to which the decoder belongs;

means for causing the headend to transmit the service group table to at least one of the plurality of decoders via the transmission medium;

means for receiving a message from the at least one of the plurality of decoders, the message including the service group associated with the at least one of the plurality of decoders; and

means for causing the updating of the database responsive to the service group associated with the at least one of the plurality of decoders being different from a stored service group association for the at least one of the plurality of decoders and for causing to be stored the updated database.

43. (Previously Presented) The system controller of claim 42, wherein the decoders are home communications terminals, televisions, or computers.

44. (Previously Presented) A system controller for determining service group associations of a plurality of modulators in a subscriber television system, the system controller comprising:

means for storing and updating a database of frequencies, related transport stream identities, and associated service group identities for each of the plurality of modulators;

means for causing the creation of a modulator tuning table for the subscriber television system, the modulator tuning table including the tuning frequencies related to each of the plurality of modulators;

means for causing to be transmitted, from the headend, the modulator tuning table via the transmission medium to at least one of the set of audit designated decoders;

means for receiving a message from at least one of the set of audit designated decoders, the message including the related transport stream identities determined by the at least one audit designated decoder based on tuning the frequencies related to each of the plurality of modulators, locating a valid transport stream related to the tuned frequency, and retrieving a related transport stream identification from the transport stream; and

means for causing the updating of the database responsive to the related transport stream identities associated with the at least one audit designated decoder.

45. (Previously Presented) The system controller of claim 44, wherein at least one of the set of audit designated decoders is also one of the plurality of decoders.

46. (Previously Presented) The system controller of claim 44, wherein the audit designated decoders and the plurality of decoders are home communications terminals, televisions, or computers.

47. (Previously Presented) A method of using at least one of a set of designated audit decoders at specific locations within a subscriber television system to define a service group, comprising the steps of:

establishing, in the headend, a modulator tuning table listing available subscriber television system frequency associated with the plurality of modulators;

transmitting the modulator tuning table from the headend on the transmission medium to at least one of the set of audit designated decoders;

retrieving the modulator tuning table at the at least one audit designated decoder;

tuning, at the at least one audit designated decoder, to each frequencies listed in the modulator tuning table and, if a valid signal is detected, retrieving an associated Motion Picture Experts Group (MPEG) transport stream identity for the tuned frequency;

transmitting to the headend, by the at least one audit designated decoder, the retrieved associated transport stream identities for the tuned frequency associated with the at least one audit designated decoder; and

defining as the service group the subset of modulators associated with the transport stream identities of the tuned frequencies with a valid signal of the at least one audit designated decoder and associated with the specific location of the at least one audit designated decoder.

48. (Previously Presented) The method of claim 47, wherein the at least one audit designated decoder and the plurality of decoders include at least one of the following: home communications terminals, televisions, and computers.

49. (Previously Presented) The method of claim 47, further including the step of defining all the service groups of the subscriber television system based on the subset of modulators associated with the transport stream identities of the tuned frequencies with a valid signal and associated specific location of each of the set of audit designated decoders.

50. (Previously Presented) The method of claim 47, wherein at least one of the set of audit designated decoders is also one of the plurality, of decoders.